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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,331	06/27/2003	Vinod V. Panikkath	20002/16222	7974

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GROSSMAN & FLIGHT LLC  
Suite 4220  
20 North Wacker Drive  
Chicago, IL 60606-6357

EXAMINER

LUU, AN T

ART UNIT PAPER NUMBER

2816

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/608,331

Applicant(s)

PANIKKATH ET AL.

Examiner

An T. Luu

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1,3,5-9,11-14 and 16 is/are rejected.
- 7) ☒ Claim(s) 2,4,10,15 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by the Becker reference (US Patent 5,695,494).

Becker discloses in figure 1 an apparatus comprising a duty cycle adjustment circuit 39; an output stage,27 configure to receive an input signal (node 13); and a replica output stage 32 configure to receive the input signal and to produce an output signal that is coupled to the duty cycle adjustment circuit, wherein the duty cycle adjustment circuit is configured to affect the duty cycle of the input signal (as shown as a feed back line) as required by claim 1.

As to claim 3, col. 5, line 65 and col. 6, line 31, disclose elements 27 and 32 are similar device. Consequently, These elements have the same duty cycle.

As to claim 5, figure 1 discloses a switching circuit 40 for terminating the output stage.

As to claims 13, 14 and 16, they are rejected for reciting method derived from the rejected apparatus of claims 1, 3 and 5, as indicated above.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-9, 11, 12 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over the Becker reference (US Patent 5,695,494) in view of Ta reference (US Patent 4,962,323).

Becker discloses all the claimed invention of claims 6-9 and 11 except for teaching elements of his circuitry including discrete component (i.e., FET, MOS, CMOS, bipolar and the like) as specifically required by these claims.

Ta discloses in figure 3 a voltage comparator comprising transistors as required by these claims. It would have been obvious to one skilled in the art at the time the invention was made to incorporate the teachings of Ta into that of Becker since Becker discloses a generic voltage comparator wherein Ta discloses one of ways to implement the comparator circuit.

A skilled artisan in the art would have utilized the circuit taught by Ta for the benefit of reducing resistant of transfer gates.

As to distinction among MOS, CMOS, FET, MESFET, bi-polar and the likes, it is well known in the art that there is a trade-off among different kind of transistors (i.e., cost, dimension, conductive capability). A skilled artisan would have selected a particular type of transistor to meet the requirement of a specific application/environment.

As to claim 12, col. 2, line 21 of Becker discloses his circuit is formed on a substrate.

***Allowable Subject Matter***

5. Claims 18-20 are allowed.

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6. Claims 2, 4, 10, 15 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose an apparatus and method thereof comprising elements being configured as recited in claims. Specifically, none of the prior art teaches or fairly suggests, among other things, the limitation *“a driver stage coupled to the output stage, wherein the driver stage includes an output configured to produce the input signal coupled to the output stage and wherein the driver stage further includes an input coupled to the duty cycle adjustment circuit and configured to receive a duty cycle adjustment signal therefrom”* as required by claim 2; *“the output stage is configured to consume a first amount of current and the replica output stage is configured to consume a second amount of current that is less than the first amount of current”* as required by claims 4 and 15; *“a bias circuit coupled to the output stage and the replica output stage, wherein the bias circuit is configured to provide more current for the output stage than for the replica output stage”* as required by claims 10 and 17; and *“a laser diode coupled to the output stage and configured to receive the output signal”* as required by claim 18.

### **Conclusion**


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 571-272-1746. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

An T. Luu  
5-5-05 

  
TUANT.LAM  
PRIMARY EXAMINER